

Claims

1. Propellant gases characterised in that they contain TG 227, optionally in admixture with one of more propellant gases from the group comprising TG 11, TG 12, TG 114, propane, butane, pentane and DME.

2. Propellant gases according to claim 1, characterised in that they additionally contain at least one surface-active substance.

3. Propellant gases according to claim 2, characterised in that the surface-active substance is a phospholipid, a sorbitan ester with a higher saturated or unsaturated fatty acid or a polyethoxysorbitan ester of a higher, preferably unsaturated fatty acid.

4. Propellant gases according to claim 2, characterised in that the surface-active substance is a lecithin, a polyethoxyethylenesorbitan oleate or sorbitan trioleate.

5. Pharmaceutical preparations for producing powder aerosols based on propellant gases according to claim 1, 2, 3 or 4, characterised in that they contain as active substance a betamimetic, an anticholinergic, a steroid, an antiallergic or a PAF-antagonist or a combination of such compounds.

6. Pharmaceutical preparations according to claim 5, characterised in that the betamimetic used is:

Bambuterol
Bitolterol
Carbuterol
Clenbuterol
Fenoterol

Hexoprenalin

Ibuterol

Pirbuterol

Procaterol

Reproterol

Salbutamol

Salmeterol

Sulfonterol

Terbutalin

Tulobuterol

1-(2-fluoro-4-hydroxyphenyl)-2-[4-(1-benzimidazolyl)-2-methyl-2-butylamino]ethanol

erythro-5'-hydroxy-8'-(1-hydroxy-2-isopropylaminobutyl)-2H-1,4-benzoxazin-3-(4H)-one

1-(4-amino-3-chloro-5-trifluoromethylphenyl)-2-tert.-butylamino)ethanol

1-(4-ethoxycarbonylamino-3-cyano-5-fluorophenyl)-2-(tert.-butylamino)ethanol

the anticholinergic used is:

Ipratropium bromide

Oxitropium bromide

Trospium chloride

Benzilic acid-N- β -fluoroethylnortropine ester methobromide

the steroid used is:

Budesonide

Beclomethasone (or the 17, 21-dipropionate thereof)

Dexamethasone-21-isonicotinate

Flunisolide

The antiallergic agent is:

Disodium cromoglycate

Nedocromil

The PAF-antagonist is:

WEB 2086

WEB 2170

• WEB 2347.

7. Pharmaceutical preparations according to claim 5, characterised in that the combination of the active substances comprises one of the betamimetics specified in claim 6 and one of the anticholinergics specified in claim 6.

8. Pharmaceutical preparation according to claim 5, characterised in that the combination of the active substances comprises one of the betamimetics specified in claim 6 and disodium chromoglycate.

9. Pharmaceutical preparation according to claim 5, characterised in that the combination of the active substances contains one of the betamimetics specified in claim 6 and one of the PAF-antagonists specified in claim 6.

10. Pharmaceutical preparation according to claim 5, characterised in that the combination of the active substances comprises disodium chromoglycate and one of the PAF-antagonists specified in claim 6.

11. Process for preparing pharmaceutical preparations according to claims 5 to 10, characterised in that pharmaceutically active substances micronised by conventional methods are suspended in a liquefied propellant gas mixture according to claim 1, 2, 3 or 4, optionally with the addition of surface-active substances.